



Water Testing Equipment

Hach is the world-leading supplier of water quality monitoring equipment, accessories and reagents that are designed to make water analysis accurate, efficient, and easy to conduct. From the lab to the field and factory, Hach equipment and reagents provide total confidence in the measurement of the many water analysis parameters for various applications such as drinking, process water and discharge of effluent into the environment.

Hach offers an enormous range of products suitable for every testing, analysis, and monitoring application imaginable, all supported by local specialists as well as direct access to the Hach Service network for more specific advice. A limited range of the more commonly demanded products are detailed, though specifications of equipment for more specialized applications are available on request.

LAB INSTRUMENTS

Equipment	Description
Spectrophotometers	Dr6000 - Benchtop spectrophotometer with the capability to scan across UV/Vis spectrum at 190 - 1100 nm suitable for lab operations. DR3900 - Benchtop visible spectrum, split beam spectrophotometer suitable for lab operations. Wavelength range: 320 - 1100 nm DR1900 - Portable and field-suitable spectrophotometer. Wavelength range: 340 - 800 nm. All Spectrophotometers are equipped with up to 220 in-built programs for testing a variety of parameters and are equipped with USB ports for data transfer. Mostly used in Drinking and Industrial water, Power, and Beverages sectors
Calorimeters	DR900 - Portable field-durable colorimeter able to perform up to 90 tests with an intuitive user interface, data storage for up to 500 tests and a built-in USB port for data transfer. Wavelength Range: 420 nm, 520 nm, 560 nm, 610 nm. DR300 – single parameter or wavelength specific portable pocket colorimeter able to perform up to 20 tests with USB ports for data transfer. Applications: Boiler Water Cooling Water Power Water Treater Drinking Water Wastewater Food and Beverage Clean in Place (CIP) Pool and Spa Pulp and Paper.
Turbidity Meters	TU52 – For drinking water and other clean water applications. Range: 0 – 700NTU. TU5 series is equipped with the latest 360° x 90° Detection Technology, resulting in the most sensitive and accurate readings possible. TL23 – For high turbidity range applications up to 10,000NTU such as wastewater applications 2100Q – Portable turbidity meters testing a range of 0 – 1,000NTU.
Titration Systems	Manual Titrator - High resolution (125μ L/digit) and high accuracy (\pm 1%) titration equipment. Applicable in titration for more than 40 parameters with interchangeable cartridges. Automatic/ Potentiometric Titrators - Titralab AT1000 & KF1000 Series - Used with different application packages and designed to test unique parameters to ensure accurate and reproducible measurements immediately. AT1000 Series – Consists of the application package and the Titrator which make it quick and easy to use in the lab. Used in high-capacity testing laboratories. Titration systems application areas: Drinking Water/Wastewater, Food/Beverage, Petrochemical, Biogas
BODTrak II Apparatus	Simplified BOD analysis with the BODTrak™II Respirometric BOD Apparatus, control unit and stirrer with pressure sensors for 6 bottles. Low Temperature BOD Incubator sold separately. The apparatus automatically ends the test and stores the results after the chosen BOD measurement programme of 5, 7 or 10 days. Measuring range 0-700 mg/L O₂, variable.
DRB200 Digital Reactor	The DRB200 dry thermostat reactor offers effortless operation using Hach's preset digestion methods. It rapidly heats from 20° to 150°C within 10 minutes, suitable for metal and nutrient analysis or biological sample digestion. Precise temperature control (37 to 165°C) and adjustable time settings (1-480 minutes) are available. It accommodates 13mm, 16mm, and 20mm round vials, supporting simultaneous digestions via dual block models.

PORTABLE FIELD INSTRUMENTS

Equipment	Description
HQ / HQD Meters / Intellical Probes	Handheld multiparameter meters using Intellical probes featuring automatic parameter and buffer or standard recognition in the laboratory and field applications. Wide variety of probes available for measuring pH, Dissolved Oxygen, Conductivity, Total Dissolved Solids, Ammonia, Ammonium, Chloride, Fluoride, Nitrate, Sodium, Biochemical Oxygen Demand and RedOx (ORP).
Pocket Testers	Pocket Pro Testers - Portable, convenient solutions for pH, ORP, conductivity, TDS, salinity, and temperature, delivering accurate results with replaceable sensors. Pocket Dissolved Oxygen (DO) Meter - Measures Dissolved Oxygen (DO) to determine water quality in a variety of applications including wastewater, aquariums, and fish hatcheries. Simultaneously displays DO and temperature readings
SL000 Portable Parallel Analyzer (PPA)/ Chemkeys	SL1000 Portable Parallel Analyzer (PPA) performs the colorimetric water tests 75% faster by using Chemkey reagents instead of powder pillows. Get highly accurate results, with less opportunity for errors, in a fraction of the time, Up to 6 parameters tested simultaneously. Chemkey reagents are available for measuring for the following: - Colorimetric tests: Monochloramine, Free & Total Ammonia, Free & Total Chlorine, Nitrite, Copper, HR & LR Orthophosphate, HR & LR Hardness, HR & LR Alkalinity, Dissolved Iron, Peracetic Acid. Probe-based tests: pH, Conductivity, ORP, Dissolved Oxygen, Nitrate, Chloride, Sodium, Ammonia, Fluoride.

ON-SITE ANALYZERS

Equipment Description **Turbidity Analyzers/** Sensors

TU5300 and TU5400 are either ISO 7027-1 or EPA 10258 compliant designed for drinking water and clean water. Feature an auto-cleaning module, Prognosys an advanced diagnostic system and employs 360° x 90° Detection Technology for highly precise and sensitive measurements. Analysis range of 0 to 700 NTU/FNU/FTU with lower limit of detection (LOD) and repeatability: 0.002 NTU (TU5300) and 0.0001 & 0.0006 NTU (Tu5400).

Solitax sc Sensors are DIN EN ISO 7027 and DIN 38414 compliant high-precision process turbidity probe for clear to strongly turbid liquids. Feature automatic wiper cleaning system, Prognosys compatible and analysis range of Turbidity: 0.001 - 4000 NTÚ and up to 0.001 - 500 g/LTSS content.

Chlorine Analyzer



CL17sc Colorimetric Chlorine Analyzer uses colorimetric DPD technology to measure free & total chlorine for real time process control. Feature DPD Reagent Replacement, programmable maintenance alerts and step by step maintenance instructions and EPA Method 4500-CL G and 334.0 Compliant. Analysis Range of Range of 0 - 10 ppm Cl with Lower Limit of Detection (LOD) and repeatability of 30 ppb (0.03 ppm).

CLF10sc/CLT10sc Amperometric Chlorine Analyzer uses amperometric technology to measure free & total chlorine continuously for real time process control. Feature No Reagent Replacement, No Waste Stream and EPA Method 334.0 Compliant. Analysis Range of Range of 0 - 20 ppm Cl with Lower Limit of Detection (LOD) and repeatability of 0.03 ppm.

pH, ORP & Conductivity Sensors



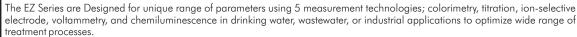
pH Sensors: -2.0 to 14.0 pH, Temperature Ranges between -5 OC -110 OC

ORP Sensors: -2000 to 2000 mV, Operating Temperature Ranges between -5 to 110 0C Conductivity sensors: 0.01S/cm to 2000 mS/cm, Operating Temperature Range of -10 0C to 200 0C

Application Areas: power, wastewater, high purity samples, municipal, industrial, pharmaceutical

EZ Series Analyzer





Features variety of measuring ranges, multi-stream capabilities (up to 8 channels), multiple parameter options and digital (Modbus RS485 & TCP) and up to 8 mÅ Outputs

Parameters Analyzed

Metals: Aluminum, Arsenic, Boron, Chromium, Copper, Iron, Manganese, Zinc

Inorganics: Chloride, Chlorine (high range), Cyanide, Fluoride, Hydrogen Peroxide, Silica, Sulfate, Sulfide

Nutrients: Ammonium, Nitrate, Nitrite, Phosphate, Total Nitrogen, Total Phosphorus Special Parameters: Adenosine Triphosphate, Microbial Activity, Toxicity, Color

Organics: COD, TOC, Phenol, Volatile Fatty Acids (VFA), Hardness & Alkalinity, Hardness (Total / Ca / Mg), Alkalinity (Free / Total)

Controllers





SC4500: Controller feature a wide range of up to 2 analog and/ or digital connectivity options for Hach Sensors and analyzers, Prognosys predictive diagnostic software and data management features.

SC1000: Controller consists of a Display Module and at least one Probe Module. SC1000 Probe Modules feature connectivity of up to 8 sensors or analyzers but can be networked together to accommodate up to 32 digital sensors or analyzers. Both Controllers are iDAYLIFF and BMS products compatible with one or a combination of the following outputs: 0/4-20 mA Analog Output, Relays, Modbus TCP/RS485, Profinet IO module, Ethernet IP module, Profibus DPV1 module,

Orbisphere 410/516 Controllers



- Depending on the version, the Orbisphere controllers can be combined with LDO oxygen sensors, EC oxygen, ozone & low-level hydrogen sensors and thermal conductivity carbon dioxide, nitrogen & hydrogen sensors.
- Easy to use, intuitive software using clear, full color touchscreen which acts as display and keyboard. Continuously displays real time process readings, graphed sensor trends, alarm limits, temperature and event occurrence
- Internal diagnostics and reminders for maintenance, calibration and System alarms transmitted through analog output.
- Communication combination options among Modbus RS485, 0/4-20 mA, system & measurement alarm relays, USB, Ethernet,

Available as single parameter test strips for chlorine, nitrate, nitrite, hardness, alkalinity, chloride, ammonia, etc. or multiparameter 5-

Data storage of up to 10,000 measurements, the last 1000 operator actions and details of the last 50 calibrations

LABORATORIES AND TEST KITS

Description Equipment **Multi-Parameter** Application-specific single or multi-parameter test kits categorized either by type of application, mode of analysis or measured **Test Kits** parameter sets. Each kit includes a rugged carrying case with reagents, apparatus, and user manual. Application Type: Soil and Irrigation, Aquaculture, Nitrification control, Stormwater, Surface water and Wastewater treatment plants, Professional Boiler and Cooling tests Includes: Hardness, iron, and pH test kit, Iron and manganese / pH test kit, Chlorine, Hardness, Iron, pH Test Kit, Boiler Water Test Kit, Fish Farming Test Kit, Ecology, surface water & Stream Survey Test Kits, Pool Master Test Kit, Professional Boiler and Cooling Water Test Kit Microbiological MEL Laboratory is designed for portable or small-scale microbiology testing capabilities for potable water, recreational water, **Environmental** wastewater, and non-potable water. Includes sampling/filtration consumables, vacuum filtration apparatus & consumables* Laboratory (mel) portable incubator*, microbiological analysis accessories, Colorimeter, Pocket Testers, Color discs and up to 8 key physio-chemical water quality parameters for drinking water tests. Microbiology Tests Kits Only: MEL/m-ColiBlue24® Field Filtration Laboratory - Coliform and E. coli Field Filtration Kit MEL/MPN Total Coliform and E. coli Laboratory (can be used for other microbial tests) MEL/MF Total Coliform Laboratory (can be used for other microbial tests) $Combined\ Test\ Kits\ (Microbiology + Physiochemical\ Tests):$ MEL Potable Water Laboratory – P/A microbiological analysis accessories, DR900, 8 physio-chemical reagents & pocket testers MEL/P-A safe drinking water lab - P/A microbiological analysis accessories, Color discs, 3 physio-chemical reagents & pocket **Test Strips** High-quality accurate, portable, low-cost, and easy-to-use test strips. Simply dip the strip in sample and read by comparing with colors printed on the bottle. Applicable in drinking water, wastewater, pool and spa, industrial process water, etc.

in-1 test strips, which measures free & total chlorine, hardness, alkalinity and pH.